

EPA Update: Status of Fumigant Regulatory Activities

2018 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions

November 2018

Matthew Manupella, Chemical Review Manager Pesticide Re-evaluation Division Office of Pesticide Programs US Environmental Protection Agency



Overview

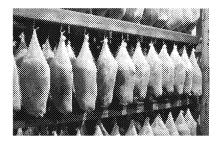
- Registration Activities
- Commodity Fumigation Issues Update
- Structural Fumigation Issues Update
- EPA Port Fumigation Trip
- Certification Updates
- Registration Review Schedule

1



Methyl Bromide CUEs

- Pre-plant critical use exemption (strawberries) expired at the end of 2016.
- Continued use of postharvest stocks for country hams beyond 2016 with pre-phase-out inventory



2



Consideration of Recent Residential Incidents

- In 2015, there were two residential fumigation incidents of serious and permanent injury in the U.S.
 - U.S. Virgin Islands- Methyl Bromide
 - Florida- Sulfuryl Fluoride
- Most recently, in August 2018 EPA became aware of an additional incident in Florida associated with the use of sulfuryl fluoride.

3



Consideration of Recent Incidents

- Office of the Inspector General (OIG) investigation report issued in December 2016 (https://www.epa.gov/sites/production/files/2016-12/documents/_epaoig_20161212-17-p-0053.pdf)
- OPP is working with stakeholders, regulatory partners, and registrants to address recommendations

4



OIG Recommendations

- Revise Agency guidance or policy with updated mitigation options regarding Fumigant Management Plans and barriers to accessing structures during fumigation
- 2. Create guidance which clarifies the criteria for meeting the applicator stewardship training requirement
- 3. Develop and implement a strategy to assess the effectiveness of devices to detect required clearance levels

United States Environmental Protection Agency

5



Response to OIG Recommendations

Evaluating Label Changes for Sulfuryl Fluoride:

- EPA has been working with stakeholders to implementing a process to evaluate label changes for sulfuryl
- EPA will continue to work with states and the user community through these groups.
- Implementation of the revised labels will occur as part of the registration review process for sulfuryl fluoride, which is currently scheduled to be concluded in fall 2021.



Response to OIG Recommendations

Improving consistency across registrant stewardship plans:

- EPA has been working with stakeholders on a draft stewardship training plan that is supported by the registrants
- EPA received feedback from stakeholders and is continuing to work with the registrants and other groups
- EPA plans to finalize stewardship materials by early 2019.



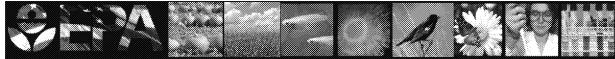
Response to OIG Recommendations

Working to validate the effectiveness of devices used to clear structures post fumigation:

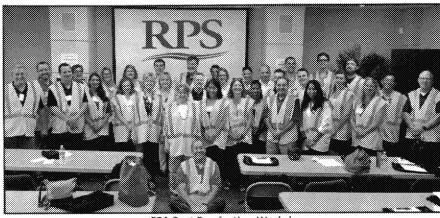
 EPA's Analytical Chemistry Laboratory is currently developing a draft protocol, purchasing clearance devices, and expects to complete a preliminary evaluation of the devices by early 2019.

United States Environmental Protection Agency

NOTE: Pending the outcome of this preliminary evaluation, OPP may need to revise the protocol and perform additional testing. OPP's laboratory testing results, along with other information, will help inform if additional guidance (other than the manufacturers') is necessary for the safe and proper use of clearance devices.



ASPCRO/NPMA **Fumigation Workshop**



EPA Port Fumigation Workshop

July 10-11, 2018 | Port of Wilmington, DE Presented by: ASPCRO / NPMA / RPS/Royal Fumigation, An Ecolab Company

Thank you for joining us!
United States Environmental Protection Agency

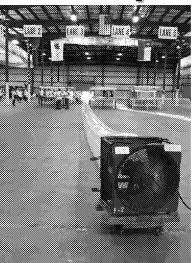
9

9



ASPCRO/NPMA Fumigation Workshop

- Opportunity for participants to enhance understanding of current practices
- Demonstrations on preparation, introduction, and aeration for commodity fumigation
- Discussed state enforcement challenges, and other stakeholder needs



10



Registration Review

- Registration Review must be completed by October 1, 2022
- Soil fumigants, and commodity/structural/ antimicrobial fumigants are going through registration review in groups
 - Began in 2013 for most fumigant active ingredients

11



Anticipated Schedule

Open Public Dockets September 2013

Comment Period Ends November 2013

Final Work Plan February 2014

Data Call-In Summer 2014

Data Submission 2016 - 2018

Risk Assessment (Soil) 2018/2019

Risk Assessment (Structural) 2019/2020

Interim Decision (Soil) 2019/2020

Interim Decision (Structural) 2020/2021

12



Registration Review - Soil Fumigants

Information on individual soil fumigants can be found at www.regulations.gov

- Chloropicrin EPA-HQ-OPP-2013-0153
- Dazomet EPA-HQ-OPP-2013-0080
- 1,3-Dichloropropene EPA-HQ-OPP-2013-0154
- Dimethyl disulfide EPA-HQ-OPP-2013-0488
- Metam Sodium/Potassium EPA-HQ-OPP-2013-0140
- Methyl Bromide EPA-HQ-OPP-2013-0269

13



Registration Review – Soil Fumigants

- Reviewing data submissions
 - New flux data, application methods
- Developing ecological and human health risk assessments
 - Assessments for dazomet, chloropicrin, and metam were completed in October 2018
 - Were streamlined if possible to reflect changes since Reregistration
 - Ambient air monitoring and/or modeling will be incorporated as available
- Will revise if needed, "Health Effects Division Recommendations for Good Agricultural Practices and Associated Buffer Credits"
- Will continue to work with stakeholder groups to discuss mitigation early

14



Registration Review – Structural/Commodity Fumigants

- Information on other fumigants can be found at www.regulations.gov
- Aluminum phosphide, magnesium phosphide, and phosphine - EPA-HQ-OPP-2013-0081
- Ethylene oxide EPA-HQ-OPP-2013-0244
- Inorganic sulfites EPA-HQ-OPP-2013-0598
 - Sulfur dioxide
 - Sodium metabisulfite
- Methyl bromide EPA-HQ-OPP-2013-0269
- Methyl isothiocyanate (MITC) EPA-HQ-OPP-2013-0242
- Propylene oxide EPA-HQ-OPP-2013-0156

15



Registration Review – Structural/Commodity Fumigants

- Awaiting data submissions
 - Inhalation toxicity studies, occupational exposure data
- Ecological and human health risk assessments
 - Will be streamlined, if possible, to reflect changes since Reregistration
- Continue to work with stakeholder groups to discuss mitigation early
 - i.e., Fumigation Management Plans for non-soil fumigants

16



For More Information:

EPA Fumigant Page

https://www.epa.gov/soil-fumigants

Chemical Search Database

https://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

Fumigant Registration Review Contact

Matthew Manupella; manupella.matthew@epa.gov

17

United States Environmental Protection Agency

Many of you are familiar with the soil fumigant toolbox that the agency developed following reregistration, and that continues to be an important resource to users.

Easier to navigate web content has been a priority of EPA, and over the past year, there have been major updates to make our websites more user-friendly. We continue focus on transparency, by adding informational resources as they become available – for example, our decisions and many data reviews are available through the chemical search database.

But even as our methods of communication and information sharing continue to be steered by technological advances, we believe that in-person dialogue is still key in mutual understanding, collaboration, and progress towards common goals. For any additional questions, please stop by while we're here this week, or please contact Dana Friedman in the Pesticide Re-evaluation Division.

17